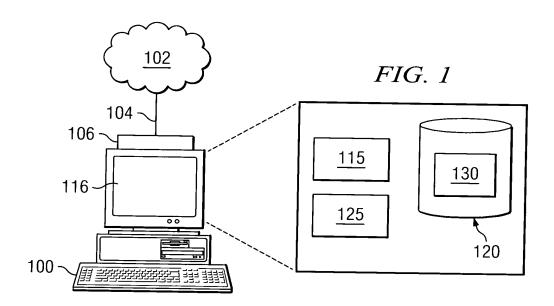Attorney's Docket No. 063170.2575
(20000298)
System and Method for Automatically Determining Modal Value of Non-Numeric Data
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FIG. 1

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FIG. 2A-1

200

202 — SELECT DATA SUBSET FROM DATASET

204 IS DATA SUBSET EMPTY?

— YES → 206 SET MODAL VALUE TO NULL → END

NO

208 — SET HIGH COUNT TO ONE

210 — SORT DATA SUBSET BY DATA TYPE AND VALUE

212 — SELECT FIRST DATA OBJECT FROM SORTED DATA SUBSET

214 — DETERMINE DATA TYPE OF SELECTED DATA OBJECT

215 — ADD ONE TO ASSOCIATED MODAL COUNT

FROM FIG. 2A-2
(C)

216 — ADD VALUE TO MODAL LIST

217 — SELECT NEXT DATA OBJECT FROM THE DATA SUBSET

218 IS CURRENTLY SELECTED DATA OBJECT THE SAME DATA TYPE?

— NO → 219 SET MODAL COUNT TO ONE → (B) TO FIG. 2A-2

YES

220 — COMPARE CURRENTLY SELECTED DATA OBJECT TO PRIOR DATA OBJECT → (A) TO FIG. 2A-2

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(20000298)
*System and Method for Automatically
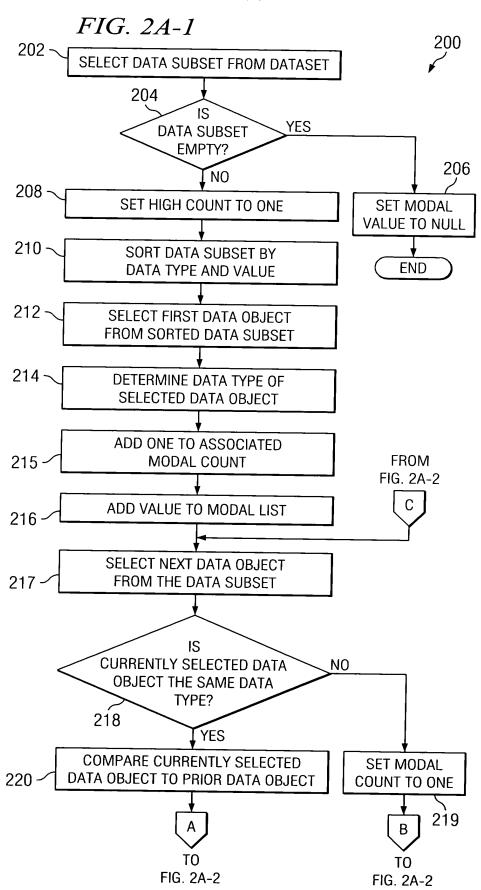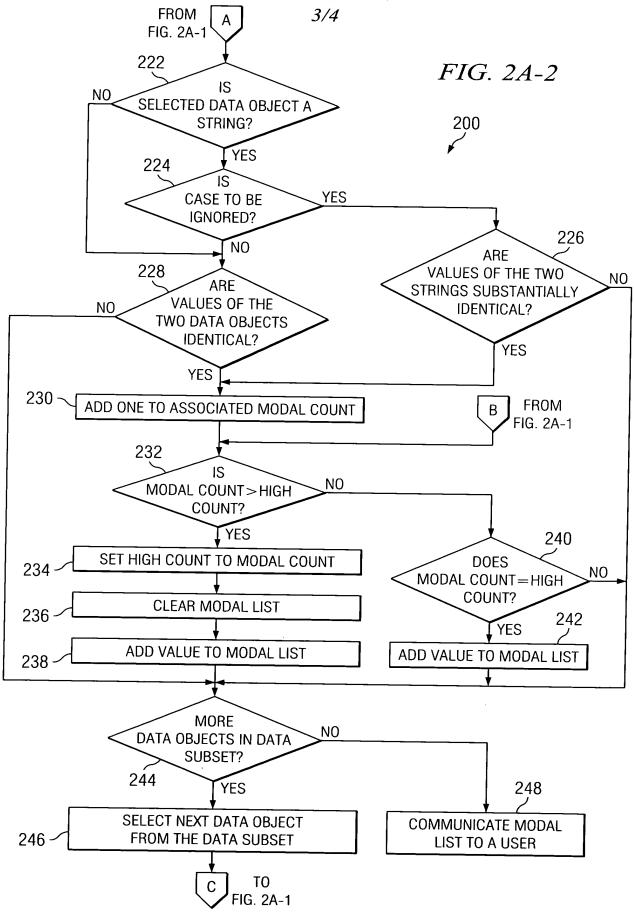Determining Modal Value of Non-Numeric
Data*
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FROM
FIG. 2A-1   A   *3/4*

FIG. 2A-2

200

222
IS
SELECTED DATA OBJECT A
STRING?   NO

YES

224
IS
CASE TO BE
IGNORED?   YES

NO

228
ARE
VALUES OF THE
TWO DATA OBJECTS
IDENTICAL?   NO

226
ARE
VALUES OF THE TWO
STRINGS SUBSTANTIALLY
IDENTICAL?   NO

YES

YES

230   ADD ONE TO ASSOCIATED MODAL COUNT   B   FROM
FIG. 2A-1

232
IS
MODAL COUNT > HIGH
COUNT?   NO

YES

234   SET HIGH COUNT TO MODAL COUNT

240
DOES
MODAL COUNT = HIGH
COUNT?   NO

236   CLEAR MODAL LIST

YES   242

238   ADD VALUE TO MODAL LIST

242   ADD VALUE TO MODAL LIST

MORE
DATA OBJECTS IN DATA
SUBSET?   NO

244   YES

248

246   SELECT NEXT DATA OBJECT
FROM THE DATA SUBSET

COMMUNICATE MODAL
LIST TO A USER

C   TO
FIG. 2A-1

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FIG. 2B

252 — SELECT DATA SUBSET FROM DATASET

254 — SORT DATA SUBSET BY DATA TYPE AND VALUE

256 — SELECT FIRST DATA OBJECT FROM DATA SUBSET

258 — ADD VALUE FOR SELECTED DATA OBJECT TO LOOKUP TABLE

250

260 — ASSIGN ONE TO LOOKUP COUNT FOR VALUE IN LOOKUP TABLE

262 — SELECT NEXT DATA OBJECT FROM DATA SUBSET

264 — SCAN LOOKUP TABLE FOR MATCHING VALUE FOR SELECTED DATA OBJECT

266 — IS MATCHING VALUE IN LOOKUP TABLE?

YES → 269 — ADD ONE TO LOOKUP COUNT FOR MATCHING VALUE IN LOOKUP TABLE

NO

267 — ADD VALUE FOR SELECTED DATA OBJECT TO LOOKUP TABLE

268 — ASSIGN ONE TO LOOKUP COUNT FOR VALUE IN LOOKUP TABLE

MORE DATA OBJECTS IN DATA SUBSET? — YES

270

NO

272 — SORT THE LOOKUP TABLE FROM HIGH TO LOW BASED ON LOOKUP COUNT

274 — SET HIGH COUNT TO FIRST LOOKUP COUNT

276 — SELECT VALUE ASSOCIATED WITH HIGHEST LOOKUP COUNT

278 — ADD SELECTED VALUE TO MODAL LIST

280 — SELECT NEXT LOOKUP COUNT FROM LOOKUP TABLE

DOES SELECTED LOOKUP COUNT=HIGH COUNT? — YES

282

NO

284 — COMMUNICATE MODAL LIST TO USER